



having a common time base and intended to be presented simultaneously. To accomplish this, the System Layer defines the data stream syntax that provides for timing control and the synchronization and interleaving of the video and audio bitstream. The system layer provides capability for (1) video and audio synchronization, (2) stream multiplex, (3) packet and stream identification, (4) error detection, (5) buffer management, (6) random access program insertion, (7) provide data, (8) conditional access, and (9) interoperability with other networks, such as those using asynchronous transfer mode (ATM).

IN THE CLAIMS:

Please cancel Claim 6.

Please amend Claims 1, 3 and 13 as set forth below.

1. (Thrice Amended) A method of synchronizing the frequency of a local clock of a digital data decoder with the frequency of a program clock, wherein the decoder includes hardware for adjusting the local clock frequency and a processor having a software program for adjusting the local clock frequency, the method comprising the steps of:
determining the difference between the local and program clock frequencies, then adjusting the frequency at which the local clock oscillates so that said difference approaches zero;
including the steps of:
i) using the hardware to adjust the local clock frequency until a threshold condition occurs,
and
ii) after the threshold condition occurs, using the processor to adjust the local clock frequency.

3. (Twice Amended) A method of synchronizing the frequency of a local clock of a digital data decoder with the frequency of a program clock, wherein the local clock oscillates at a local clock frequency, the method comprising the steps of:

determining the difference between the local and program clock frequencies, then adjusting the frequency at which the local clock oscillates so that said difference approaches zero;

maintaining a local clock value based on the oscillations of the local clock;

receiving clock time stamps at the decoder which specify the program clock value and frequency;

maintaining a program clock value based on the clock signals received at the decoder;

determining if there is any difference between the local clock and the program clock frequencies;

determining if there is an absolute difference between the local clock value and the program clock value;

if there is either a difference between the local clock and the program clock frequencies or an absolute difference between the local clock value and the program clock value, then adjusting the frequency at which the local clock oscillates so that said difference approaches zero;

wherein the decoder includes hardware for adjusting the local clock frequency and a processor having a software program for adjusting the local clock frequency, and wherein the step of adjusting the frequency of the local clock includes the steps of:

using the hardware to adjust the local clock frequency until a threshold condition occurs; and

after the threshold condition occurs, using the processor to adjust the local clock frequency.